Australian Packaging Covenant

Annual Report for calendar year 2020

D&D Technologies
World's most trusted gate hardware

D&D TECHNOLOGIES Pty Ltd
Unit 6, 4-6 Aquatic Drive
Frenchs Forest
NSW 2086
www.ddtech.com

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1. Foreword

Sustainable packaging plays an essential role in our business by maintaining the conditions under which humans and nature can exist in productive harmony, as well as protecting and preserving our products and brand.

Our sustainable packaging processes have a positive impact on our suppliers, our customers, our staff, and the wider community. Our sustainable packaging processes do not just care about today, but about its impact in the years and decades to come.

'One Nation – Global Impact'

2. Executive Summary

Sustainable packaging guidelines provided by the **Australian Packaging Covenant Organisation** (**APCO**) has played an important role in our global operations from Product Development through to Supply Chain and Sales and Marketing. Most importantly, **APCO** has been one of the vehicles that helped to shape our business operations towards for a more sustainable future.

The top four measurable benefits D&D gained from adopting the APCO guidelines are below;

1. In 2018, all our US Retail product Lines rolled over to new bulk packaging configuration. If we were to continue with the previous 2x6 packaging configurations for 2020, we estimated a potential saving of **$228,038.42** in shipping costs and a reduction of **38,173.44 kg** in the use of cardboard packaging.
2. In 2018 all our packaging material specification consolidated to reduce waste during our manufacturing process.
3. Reconfiguring the packaging for our TruClose® Trade Product line, in 2019, we rolled over a new packaging configuration and removed all inner cartons of 5 from our TruClose® Trade packaging. To put this into perspective, if we were to continue with the previous 5x4 packaging configurations for 2020, we estimated a potential saving of **$32,204.57** in shipping costs and a reduction of **8,192.16 kg** in the use of cardboard packaging.
4. In 2020, we initiated a review of our MagnaLatch® retail packaging for further reduction of shipping carton volume. To put this into perspective, we estimated a potential saving of **$25,446.15** in shipping costs and a reduction of **1,381.08 kg** in the use of cardboard packaging for 2021.
5. Adopting the APCO and PREP tools, the review programme of the pouch bag design and effective recyclable material initiated in 2020 to reduce material waste and associated environmental impacts in the packaging lifecycle.
6. Continuous engagement with staff to encourage ongoing recycling of disposed used cartons in the factory.

For the 2021 forecast, we estimated a potential saving of **$271,509.73** in shipping costs and a reduction of **44,344.41 kg** in the use of cardboard packaging, if we were to continue with the previous packaging configurations for our US Retail, TruClose® Trade, and MagnaLatch® retail product lines.

3. Background

*"The **Australian Packaging Covenant Organisation** (**APCO**) is a sustainable packaging initiative which aims to change the culture of business to design more sustainable packaging, increase recycling rates and reduce packaging litter."*

As a result of our obligations to the **APCO**, the team at D&D Technologies is strongly committed to achieve its **APCO** goals of sustainable packaging through responsible leadership, optimum outcomes and efficient operations. As a signatory to the **APCO** guidelines, we together have laid out a robust schedule of achievable targets supported with key performance indicators in the year 2016. These KPIs are then implemented, tracked and monitored by the Product Development Team.

As prescribed in the **APCO**, all signatories are required to report annually on their progress and achievements. All signatories, including D&D Technologies, are measured accordingly. This process is so, that by the year 2025 all signatories must satisfactorily have met all the **APCO** goals that were laid out to achieve.

100% of all Australia's packaging will be reusable, recyclable or compostable
70% of Australia's plastic packaging will be recycled or composted
50% average recycled content will be included across all packaging
Problematic and unnecessary single-use plastic packaging will be phased out through design, innovation or introduction of alternatives.

Since 2016 D&D has welcomed a new challenge to the business by involving various cross-business functions in the **APCO** from Product Development through to Logistics and Supply Chain. Under the principle '*One Nation – Global Impact*', D&D shall continue to invest resources in making the world better place, as shown by our MagnaLatch® for pool and child safety gates.

4. Our 2025 APCO targets

For 2025, our target as follows:

Performance Goal	Key Performance Driver	Measurable	Targets by 2025
1. Leadership	*Packaging Sustainability Strategy*	*Proportion of New and Existing products that are in accordance to the APCO guidelines via metrics.*	*Integrate packaging sustainability goals and targets into corporate strategy.* *Apply packaging environmental performance matrix to the New Product Process.*
	Closed-loop collaboration - Improve recovery of packaging.	*Barriers addressed to the recovery and reuse of waste packaging.* *Data to monitor the outcomes of a collaborative program.*	*Introduce a formal process to continually identify new opportunities for collaboration.*
	Consumer Engagement - Inform and educate consumers about sustainability.	*In accordance to the APCO guidelines via metrics.*	*Provide consumers with information of the sustainability of D&D packaging through D&D website or other public media*
	Industry Leadership - Improve packaging sustainability through collaborations.	*In accordance to the APCO guidelines via metrics.*	*Receive external recognition for contributions to packaging sustainability.*

Performance Goal	Key Performance Driver	Measurable	Targets by 2025
2. Outcomes	*Packaging Design and Procurement - Apply sustainability principles in the design & procurement of packaging.*	*Proportion of New and Existing products that are in accordance to the APCO guidelines.*	*100% of D&D product packaging have had their packaging designed or reviewed to meet SPG guidelines and using an LCA tool with supporting evidence.*
	Packaging Materials Efficiency - Reduce material consumption and associated environmental impacts in the packaging life cycle.	*Progress towards material efficiency (packaging weight reduced or optimised).*	*100% of D&D product packaging has been optimised for material efficiency.*
	Recycled Materials - Support a circular economy for packaging	*The percentage of products have packaging that incorporates recycled or renewable content.*	*Recycled content has been optimised for all packaging.*

	Post-Consumer Recovery - improve the recovery of packaging at the end of its life.	*Proportion of primary packaging that can be collected for reuse, recycling, composting or energy recovery through existing post-consumer recovery systems.*	*Achieve the highest potential environmental value.*
	Consumer Labelling - Improve consumer information about appropriate disposal.	*Proportion of New and Existing products that are in accordance to the APCO guidelines.*	*100% of products have labels on packaging for disposal or recovery.*
	Product-Packaging Innovation - Reduce the life cycle environmental impact of packaging.	*Number of product-packaging systems that have been evaluated and optimised.*	*Identify any remaining opportunities for innovation.*

Performance Goal	Key Performance Driver	Measurable	Targets by 2025
3. Operations	*Business-to-Business (B2B) Packaging - Reduce the amount of material used in B2B packaging.*	*The amount of B2B packaging used, pallet utilisation and weight.*	*Reduce greater than 50% in consumption of single-use B2B packaging.*
	Supply Chain Influence - Engage suppliers and business customers in packaging sustainability	*Proportion of New and Existing products that are in accordance to the APCO guidelines.*	*Develop a new packaging material or/and packaging format.*

Figure 4.1. Retail clamshell vs Retail Pouch,
which was successfully implemented in previous APCO Action Plan 2010-2015.

5. Initiatives

D&D has set out a five year plan to address the following:

a. Evaluating packaging using SPG (Sustainable Packaging Guidelines) for our US retail product lines.
b. Consolidating and harmonising packaging material specification to reduce waste during our manufacturing process, whilst improving kerbside recyclability of our packaging material.
c. Evaluating packaging using SPG for our TruClose® product lines.
d. Evaluating shipping carton sizes for our MagnaLatch® S3 retail lines.
e. Sustainable New Retail Packaging Program.

Initiative A

Currently our US retail product lines are packaged in 2*6 inner and outer carton configurations, as shown below.

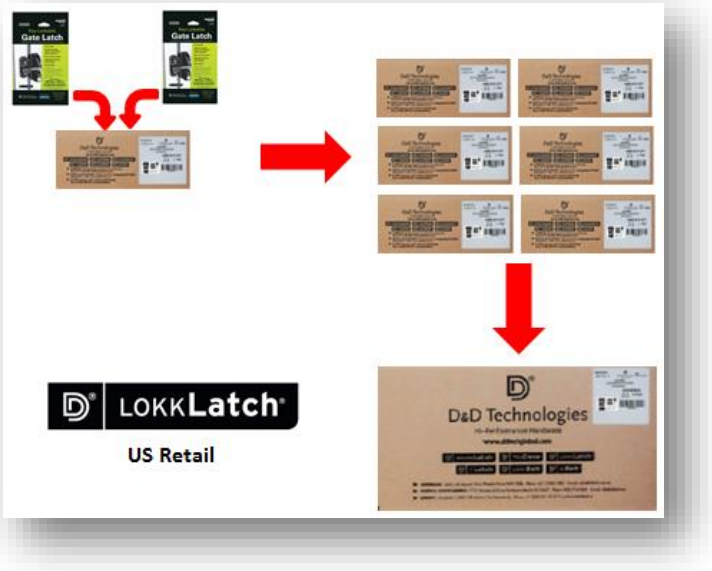


*Figure 5.1. Current 2*6 inner and outer carton packaging configuration for our US Retail Product (LLAARS).*

Whilst this packaging configuration is a request of the customer, however, this has increased our transport and logistic footprints as opposed to packaging the product in the outer cartons only.

An example is illustrated below showing the differences between packaging the same product for our retail and trade customers:

Product Name	Product Code	Outer carton volume (m^3)	Quantity per outer carton	Units per m^3
LokkLatch US retail	LLAARS	0.0361	12	332
LokkLatch US trade	LLAA	0.0485	50	1030

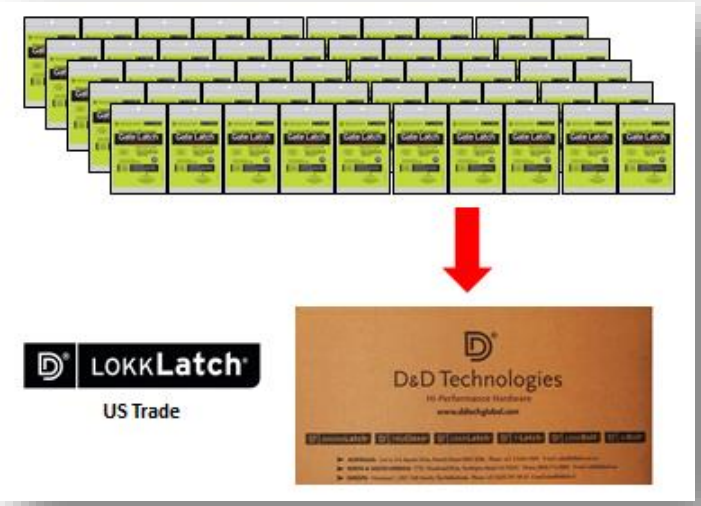


Figure 5.2. Current bulk packaging configuration for our US Trade Product (LLAA).

Under D&D's new idea research initiative process, reference IRN2135, was raised to review and experiment various packaging configuration of our US retail line.

Our APCO goals for ***Initiative A***:

APCO Goal Three: Leadership

i. *Working closely with the US sales and marketing team for customer approval of the bulk packaging configuration.*
ii. *Reducing transport and logistic footprints, including metrics to ascertain reduction in transport and logistic footprints throughout the APCO period of 2016 to 2021.*

APCO Goal Two: Outcomes

i. *Minimising the use of cardboard packaging for our US Retail product line.*
ii. *Use of recycled cardboard packaging or the application of 'recyclable' markers on cardboard material.*
iii. *Provide on-site recovery system for recovering cardboard material.*

APCO Goal One: Operations

i. *Implementing a standardised outer carton for our US retail line.*
ii. *Reduction in the amount of material used in B2B packaging.*

D&D has implemented bulk packaging of all its US Retail Products in November 2017 under ECN047.17. We successfully rolled out bulk packaging configuration under ECN090.18 for new SKUs introduced in December 2018. The following packaging configurations were implemented:

	2*6 Packing Configurations				Bulk Packing Configurations				VARIANCE	
US RETAIL PRODUCT	OUTER CARTON PART#	QTY PER OUTER CARTON	PRODUCTS PACKED PER m^3	SHIPPING COST PER PRODUCT	OUTER CARTON PART#	QTY PER OUTER CARTON	PRODUCTS PACKED PER m^3	SHIPPING COST PER PRODUCT	$	%
LLAABRU	TCARP000017PA	12	219	$0.753	MLC00000011PA	36	742	$0.228	-$0.52	-70%
LLAARU	LLMK2RP0012PA	12	333	$0.753	MLC00000011PA	48	990	$0.171	-$0.58	-77%
ML3TPKARU	MLTPRP00018PA	12	104	$1.506	MLTPRP00016PA	12	268	$0.717	-$0.79	-52%
ML3VPKARU	ML300000064PA	12	151	$1.506	MLC00000011PA	18	371	$0.456	-$1.05	-70%
MLTPS2RU	MLTPRP00018PA	12	104	$1.506	MLTPRP00016PA	12	268	$0.717	-$0.79	-52%
TCA1S3RU	TCARP000017PA	12	219	$0.753	TCAMK200009PA	24	594	$0.269	-$0.48	-64%
TCA3S3RU	TCARP000017PA	12	219	$0.753	TCAMK200009PA	24	594	$0.269	-$0.48	-64%
TCHD2S3RU	TCARP000017PA	12	219	$0.753	TCAMK200009PA	12	297	$0.538	-$0.22	-29%
LLAARS	LLMK2RP0012PA	12	333	$0.753	MLC00000011PA	48	990	$0.171	-$0.58	-77%
LLDABKRS	TCARP000017PA	12	219	$0.753	MLC00000010PA	12	361	$0.538	-$0.22	-29%
ML3TPKARS	MLTPRP00018PA	12	104	$1.506	MLTPRP00016PA	12	268	$0.717	-$0.79	-52%
ML3VPKARS	ML300000064PA	12	151	$1.506	MLC00000011PA	18	371	$0.456	-$1.05	-70%
MLSPS2RS	LLMK2RP0012PA	12	333	$0.753	TCAMK200008PA	12	1367	$0.078	-$0.67	-90%
MLTPS2RS	MLTPRP00018PA	12	104	$1.506	MLTPRP00016PA	12	268	$0.685	-$0.82	-55%
MLVPS2RS	TCARP000019PA	12	196	$0.837	MLC00000011PA	18	371	$0.456	-$0.38	-45%
TCA1S3RS	TCARP000017PA	12	219	$0.753	TCAMK200009PA	24	594	$0.269	-$0.48	-64%
TCA3S3RS	TCARP000017PA	12	219	$0.753	TCAMK200009PA	24	594	$0.269	-$0.48	-64%
TCA4RS	TCARP000019PA	12	196	$0.837	MLC00000011PA	24	495	$0.342	-$0.49	-59%

*Table 5.3. Packaging and Shipping cost analysis of US Retail Products in current 2*6 inner and outer carton configurations vs bulk packaging*

Initiative B

Currently all our retail pouches are supplied by more than one supplier, each varied material specifications. We observed the variances in material specifications can cause packaging issues during manufacturing that ultimately adds unnecessary waste. In addition, inadequate material specification can lead damage products, but also opportunity for people to open the packaging to view the contents.

Under internal references ECR017.16 and ECR037.16, the current material specification of pouches has been harmonised and the packaging artwork includes the material specification for supplier conformance.

An example is highlighted below:

	AU RB (Supplier A)	US CB (Supplier A)	AU RO (Supplier A)	US RS (Supplier A)	Supplier B
PET Layer (µm)	12	12	12	12	
VMPET Layer (µm)	12	12	12		12
NY Layer (µm)	20	20	15	15	12
PE Substrate (µm)	115	115	120	130	127
Total (µm)	**159**	**159**	**159**	**157**	**151**

Figure 5.4.Illustration of the laminate structure for the Retail Product Line).

Our APCO goals for ***Initiative B***:

APCO Goal One: Leadership

i. *Standardise material specification for our pouches.*

APCO Goal Two: Outcomes

i. *Minimising waste in production and on the retail shop floor.*
ii. *Improve see through window to reduce unnecessary opening of product packaging.*

APCO Goal Three: Operations

i. *Working closely with suppliers to standardise material specification.*

Figure 5.5. Retail Pouch Range

Initiative C

Currently our TruClose® product lines are packaged in 5*4 inner and outer carton configurations.

*Figure 5.6. Current 5*4 inner and outer carton packaging configuration for TruClose® Trade Product*

Although this packaging configuration provides high protection from the point of manufacturing site to trade stores, however, this has increased our transport and logistic footprints as opposed to packaging the product in the outer cartons only.

An example is illustrated below showing the differences between two types of packaging configurations:

Packaging Configuration	Product Code	Outer carton volume (m^3)	Units per m^3
Current 5x4	TCA1S3BT	0.041	487
Outer Carton only	TCA1S3BT	0.018	1111

Figure 5.7. New Bulk packaging configuration implemented for our TruClose® Trade Product

Under D&D's Engineering Change Review procedure, ECR015.18, was initiated to review the packaging configuration of all TruClose® Trade SKUs.

Our APCO goals for ***Initiative C***:

APCO Goal Three: Leadership

iii. *Working closely with the US Sales and Marketing team for customer approval of the bulk packaging configuration.*
iv. *Reducing transport and logistic footprints, including metrics to ascertain reduction in transport and logistic footprints throughout the APCO period of 2019 to 2024.*

APCO Goal Two: Outcomes

iv. *Minimising the use of cardboard packaging for our US Retail product line.*
v. *Use of recycled cardboard packaging or the application of 'recyclable' markers on cardboard material.*
vi. *Provide on-site recovery system for recovering cardboard material.*

APCO Goal One: Operations

iii. *Implementing a standardised outer carton for our US retail line.*
iv. *Reduction in the amount of material used in B2B packaging.*

D&D has implemented bulk packaging of all its TruClose® Trade Products in June 2018 under ECN031.18. The following packaging configurations were implemented:

Part Number	QTY Per Outer Carton	5x4 Packaging Configuration			Bulk Packaging Configuration			Variance %	
		Net Weight (KG)	Gross Weight (KG)	Volume (M3)	Net Weight (KG)	Gross Weight (KG)	Volume (M3)	KG	M3
TCA1L2S3BT	20	6.60	8.26	0.04	6.65	7.20	0.03	-13%	-35%
TCA1L2S3BTS	20	6.60	8.26	0.04	7.57	8.13	0.03	-2%	-35%
TCA1L2S3CS	20	6.70	8.36	0.04	7.32	7.87	0.03	-6%	-35%
TCA1L2S3CT	20	6.70	8.36	0.04	6.65	7.20	0.03	-14%	-35%
TCA1L2S3ST	20	6.70	8.36	0.04	6.65	7.20	0.03	-14%	-35%
TCA1L2S3WT	20	6.60	8.26	0.04	6.65	7.20	0.03	-13%	-36%
TCA1S3BT	20	6.10	7.76	0.04	5.91	6.30	0.02	-19%	-54%
TCA1S3BTC	20	6.53	8.19	0.04	6.26	6.65	0.02	-19%	-55%
TCA1S3CT	20	6.20	7.86	0.04	5.91	6.30	0.02	-20%	-55%
TCA1S3ST	20	6.20	7.86	0.04	5.91	6.30	0.02	-20%	-55%
TCA1S3WT	20	6.10	7.76	0.04	5.91	6.30	0.02	-19%	-57%
TCA2L2S3BT	20	7.20	8.86	0.04	7.25	7.80	0.03	-12%	-36%
TCA2S3BT	20	6.70	8.36	0.04	6.65	7.20	0.03	-14%	-35%
TCA3L2S3BT	20	7.80	9.46	0.04	7.82	8.37	0.03	-12%	-36%
TCA3L2S3WT	20	7.80	9.46	0.04	7.82	8.37	0.03	-12%	-36%
TCA3S3BT	20	6.70	8.36	0.04	6.71	7.26	0.03	-13%	-36%

Table 5.8. Packaging consumption and volume analysis of TruClose® Trade Products in current 5x4 inner and outer carton configurations vs bulk packaging

Initiative D

Currently we use a single size of 60x50x15 cm shipping carton to package all MagnaLatch® retail product lines.

Figure 5.9. Current packaging configuration for MagnaLatch® Retail Products

Although this packaging configuration provides high protection from the point of manufacturing site to retail stores, however, with the number of units packed per box is causing an issue when palletised and making the bottom boxes crush. This has also increased our transport and logistic footprints as opposed to packaging the product in customised options that have the right size to ship respective products.

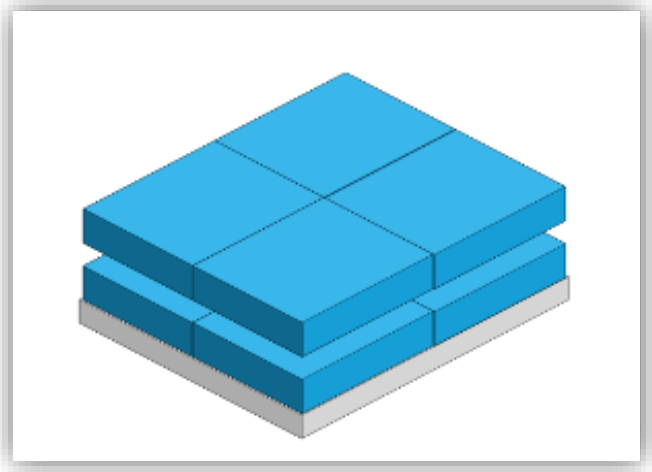


Figure 5.10. Current pallet loads for MagnaLatch® Retail Products

Moving forward, we have optimised the material efficiency, therefore, our experiments showed no further reduction in packaging weight or volume was possible.

An example is illustrated below showing the differences between the two types of packaging configurations:

Packaging Configuration	Product Code	Outer carton volume (m^3)	Units per m^3
Current 60x50x15 cm carton	ML3TPLARB	0.048	125
Customised 63.5x28x15 cm carton	ML3TPLARB	0.027	223

Figure 5.11. New packaging configuration to be implemented for our MagnaLatch® US Retail Products

Figure 5.12. New packaging configuration to be implemented for our MagnaLatch® AU Retail Products

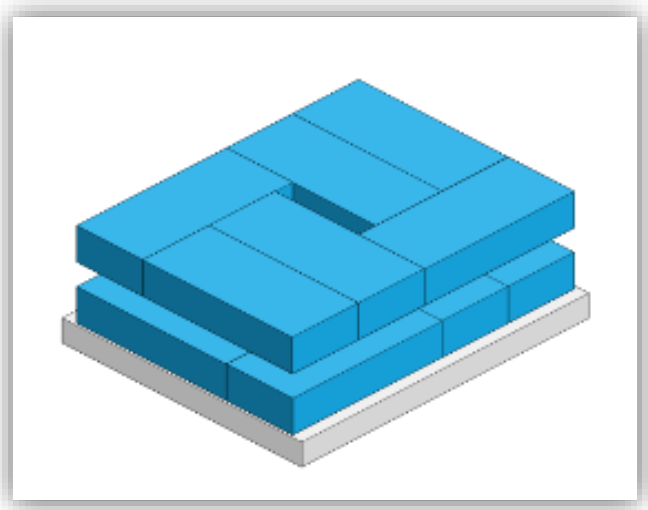


Figure 5.13. New optimised pallet loads for MagnaLatch® Retail Products

Under D&D's Engineering Change Review procedure, an initiative was managed to review packaging configuration of all MagnaLatch® Retail Products.

Our APCO goals for ***Initiative D***:

APCO Goal Three: Leadership

i. *Working closely with the Sales and Marketing team for customer approval of the new packaging configuration.*
ii. *Reducing transport and logistic footprints, including metrics to ascertain reduction in transport and logistic footprints throughout the APCO period of 2020 to 2025.*

APCO Goal Two: Outcomes

iii. *Minimising the use of cardboard packaging for our Retail product lines.*
iv. *Progress towards material efficiency (packaging weight reduced and optimised).*

APCO Goal One: Operations

v. *Develop new packaging formats for our MagnaLatch® Retail products for improved supply chain efficiency.*
vi. *Reduction in the amount of material used in B2B packaging.*

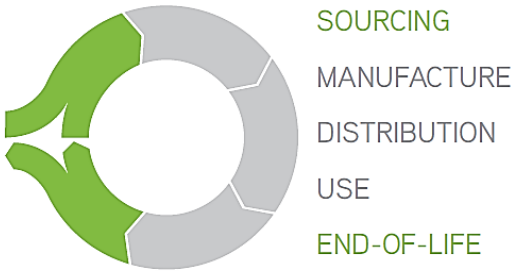
The following packaging configurations will be implemented in 2021:

Part Number	QTY Per Outer Carton	Current Packaging			New Packaging			Variance %	
		Net Weight (KG)	Gross Weight (KG)	Volume (M3)	Net Weight (KG)	Gross Weight (KG)	Volume (M3)	KG	M3
ML3KFSKRB	6	6.12	7.22	0.05	6.12	7.12	0.03	-1%	-37%
ML3TPKARS	12	9.96	11.06	0.05	9.96	10.96	0.05	-1%	0%
ML3TPKARU	12	9.96	11.06	0.05	9.96	10.96	0.05	-1%	0%
ML3TPLARB	6	4.86	5.96	0.048	4.860	5.660	0.027	-5%	-44%
ML3TPLARO	6	4.86	5.96	0.05	4.86	5.66	0.03	-5%	-44%
ML3TPLATCA1RC	6	6.75	7.85	0.05	6.75	7.60	0.03	-3%	-37%
ML3TPLDTCA1RE	6	6.60	7.70	0.05	6.60	7.45	0.03	-3%	-37%

Table 5.14. Packaging consumption and volume analysis of MagnaLatch® Retail Products in current vs new carton configurations packaging

Initiative E

Under internal references PGN00100, our product development team is currently working with sales, marketing, and supply chain in developing recyclable pouches. Adopting the APCO and PREP tools, the review programme of the pouch design and effective recyclable material is in progress to reduce material waste and associated environmental impacts in the packaging lifecycle.



D&D is currently conducting comprehensive assessments to ensure the new packaging concept will meet Sustainable Packaging guidelines, while it effectively performs the primary function of packaging from the point of manufacture, through the supply chain to the retail store and end-user. Once the assessment is completed, D&D will review supply agreements to further reinforce material specification and to include recycling markers on pouches.

Our APCO goals for ***Initiative E***:

APCO Goal One: Leadership

- *ii. Standardise material specification for our pouches.*
- *iii. Integrate packaging sustainability goals and targets into corporate strategy.*

APCO Goal Two: Outcomes

- *iii. Minimising waste in production and on the retail shop floor.*
- *iv. Improve see through window to reduce unnecessary opening of product packaging.*
- *v. Optimise recycled content for all pouch packaging.*
- *vi. Achieve the highest potential environmental value.*

APCO Goal Three: Operations

- *ii. Working closely with suppliers to standardise material specification.*
- *iii. Develop a new packaging material and packaging format.*

6. Our 2020 Achievements and Forecasted 2021 Projections

Internal references IRN2135, ECR017.16, ECR037.16, ECN047.17, ECN090.18, ECR023.21 and PGN00100 were raised for the following initiatives:

a. *Initiative A* – Evaluating packaging using SPG (Sustainable Packaging Guidelines) for our US retail product lines. Internal references IRN2135, ECN047.17 and ECN090.18
b. *Initiative B* – Consolidating and harmonising packaging material specification to reduce waste during our manufacturing process. Internal references ECR017.16 and ECR037.16.
c. *Initiative C* – Evaluating packaging using SPG guidelines for our TruClose® Trade Product line. Internal references IRN2278, ECR015.18, and ECN031.18.
d. *Initiative D* – Evaluating packaging using SPG guidelines for our MagnaLatch® Retail Product line. Internal references IRN2787 and ECR023.21.
e. *Initiative E* – Sustainable New Retail Packaging Program using SPG guidelines, APCO and PREP tools. Internal references PGN00100.

For ***Initiative A*** (Evaluating packaging using SPG – Sustainable Packaging Guidelines) for our US retail product lines), we have seen a positive result in reducing consumption of cardboard packing.

Based on actual 2019 and 2020 figures and our 2021 forecasted figures, Table 6.1 and Figure 6.2 below show the environmental impact on the business by changing the packaging configurations of our US Retail Products.

PACKAGING IMPACT (CALENDER YEAR)	2017	2018	2019	2020	2021
QTY of US Retail Products Shipped to DDINC	107,136	113,627	130,004	300,767	271,556
Quantity of Packaging used (kg)	13,104.13	5,555.71	6,433.67	11,241.26	9,554.83

Table 6.1. Environment impact trend on packing US Retail Products in bulk packaging configurations

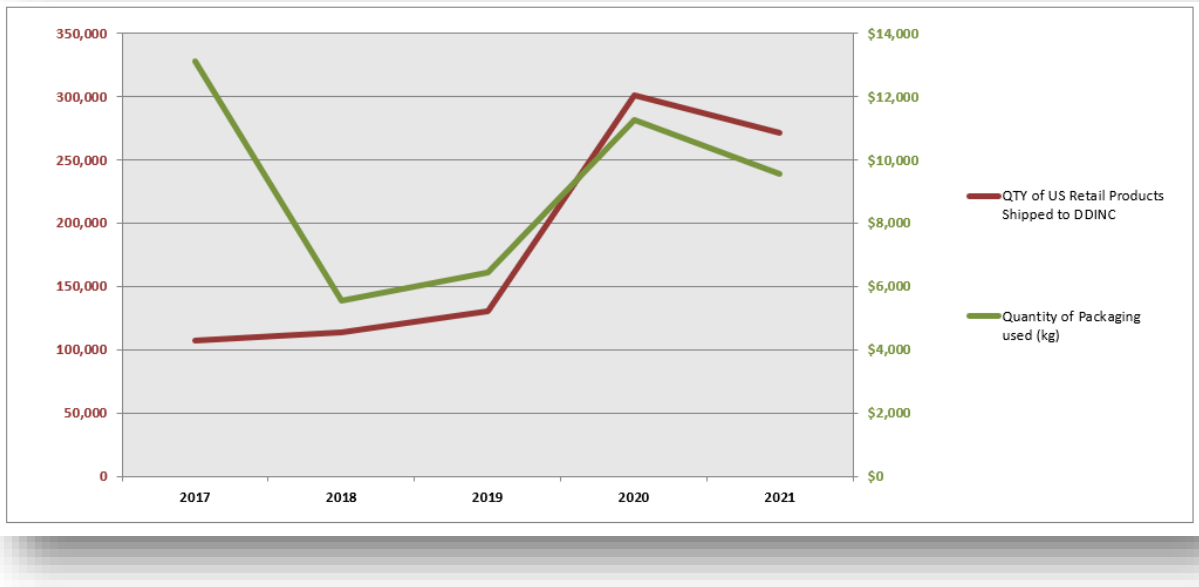


Figure 6.2. Environment impact trend on packing US Retail Products in bulk packaging configurations

For 2021, we estimated a potential reduction of 33,815.088 kg in the use of cardboard packaging, if we were to continue with the previous 2*6 packaging configurations.

Not only is this initiative reduces our carbon footprint by reducing transportation and minimising packaging, we expect additional benefits by reducing our freight cost.

Based on 2021 forecasted figures, Table 6.3 and Figure 6.4 below show the shipping cost impact on the business by implementing efficient packaging of our US retail product lines.

SHIPPING COST IMPACT (CALENDER YEAR)	2017	2018	2019	2020	2021
QTY of US Retail Products Shipped to DDINC	107,136	113,627	130,004	300,767	271,556
Cost of Shipping US Retail Products to DDINC	$132,459.12	$41,941.67	$72,274.27	$128,792.77	$106,873.89

Table 6.3. Shipping Cost Impact of US Retail Product lines from 2017 to forecasted 2021.

In 2017, the calculated shipping cost for the US Retail product line was $132,459.12 based on the shipping of 107,136 products.

Based on the 2020 calculated figures, the number of products shipped to the US increased by 193,631 US Retail product (around 181% increase). However, the calculated shipping cost did reduce by 3%, which equates to a cost saving of $228,0838.42 if we were to continue with the previous 2*6 packaging configurations. The drop in shipping cost was due to the implementation of bulk packaging. The shipping cost variance between the current 2*6 inner and outer carton configurations VS bulk packaging can be found in Section 5 (Initiative B).

For the 2021 forecast, we estimated a further potential saving of $210,045.90 in shipping costs, if we were to continue with the previous 2*6 packaging configurations.

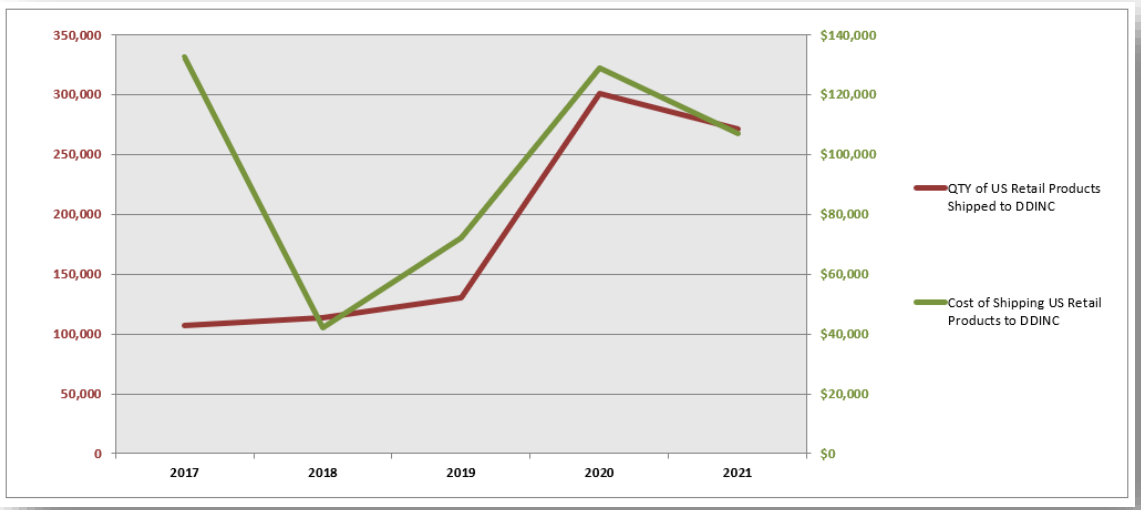


Figure 6.4. Shipping Cost Impact of US retail product lines from 2017 to forecasted 2021.

D&D shall continue to track progress of this initiative throughout the 2017-2022 reporting period.

For ***Initiative C*** (Evaluating packaging using SPG – Sustainable Packaging Guidelines) for our TruClose® Trade product lines), we have seen a positive result in reducing consumption of cardboard packing.

Based on 2021 forecasted figures, Table 6.5 and Figure 6.6 below show the environmental impact on the business by implementing efficient packaging of our TruClose® trade product lines.

ENVIRONMENTAL COST IMPACT (CALENDER YEAR)	2018	2019	2020	2021
QTY of TruClose Products Shipped to Trade Market	121,600	130,648	148,717	170,543
QTY of Packaging Used (KG)	49,514	45,916	52,235	60,392

Table 6.5. Environment impact trend on packing TruClose® Trade Products in bulk packaging configurations

In 2018 the calculated weights of cartons used for the shipment of TruClose® Trade product lines is 49,514 KG. Based on the 2020 calculated figures, the actual sales increased by 27,177 TruClose® Trade products (around a 22% increase). However, due to the implementation of bulk packaging, we gained benefit from a reduction of 2,721 KG in the use of cardboard which is an improvement of 5%.

Based on the 2021 forecasted figures, it is anticipated a sales increase of 48,943 TruClose® Trade products (around a 40% increase) over 2018. However, due to the implementation of bulk packaging, we anticipate a reduction of 9,148.25 KG in the use of cardboard, if we were to continue with the previous 5x4 packaging configurations.

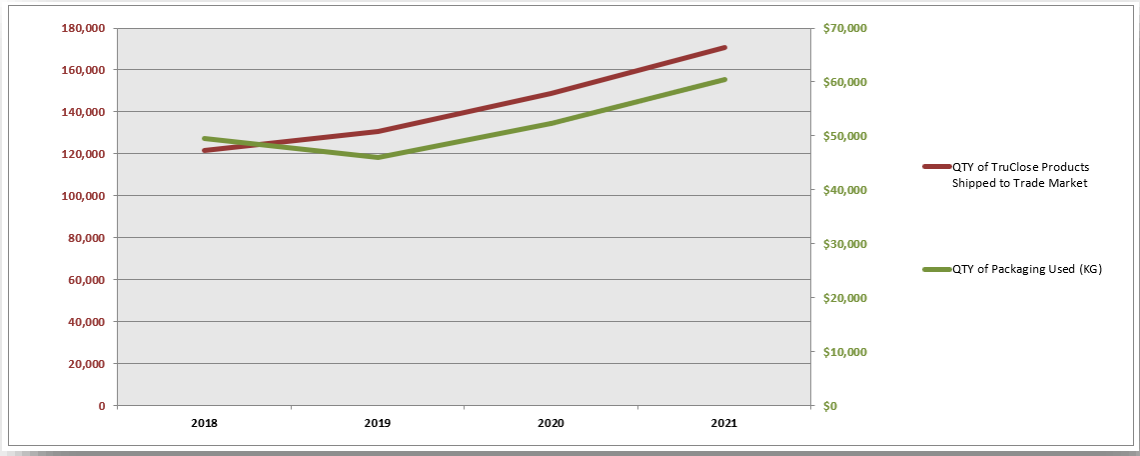


Figure 6.6. Environment impact trend on packing TruClose® Trade Products in bulk packaging configurations

Not only is this initiative reduces our carbon footprint by reducing transportation and minimising packaging, we expect additional benefits by reducing our freight cost.

Based on 2021 forecasted figures, Table 6.7and Figure 6.8 below show the shipping cost impact on the business by implementing efficient packaging of our TruClose® Trade product lines.

SHIPPING COST IMPACT (CALENDER YEAR)	2018	2019	2020	2021
QTY of TruClose Products Shipped to Trade Market	121,600	130,648	148,717	170,543
Cost of Shipping TruClose Products to Trade Market	$ 61,232.79	$ 37,443.81	$ 42,379.81	$ 49,875.00

Table 6.7. Shipping Cost Impact of TruClose® Trade Product lines from 2018 to forecasted 2021.

In 2018, the calculated shipping cost for the US Retail product line is $61,232.79 based on the shipping of 112,600 products.

Based on the 2020 calculated figures, the actual sales increased by 27,177 TruClose® Trade products (around a 22% increase) over 2018. However, we gained a cost saving of $32,204.57 to the shipping cost, if we were to continue with the previous 5x4 packaging configurations.

Based on the 2021 forecasted figures, it is anticipated a sales increase of 48,943 TruClose® Trade products (around a 40% increase) over 2018. However, we anticipate a reduction of 19% to the shipping cost, which equates to a cost saving of $36,018.49 if we were to continue with the previous 5x4 packaging configurations. The drop in shipping cost is due to the implementation of bulk packaging. The shipping cost variance between the current 5x4 inner and outer carton configurations VS bulk packaging can be found in Section 5 (Initiative C).

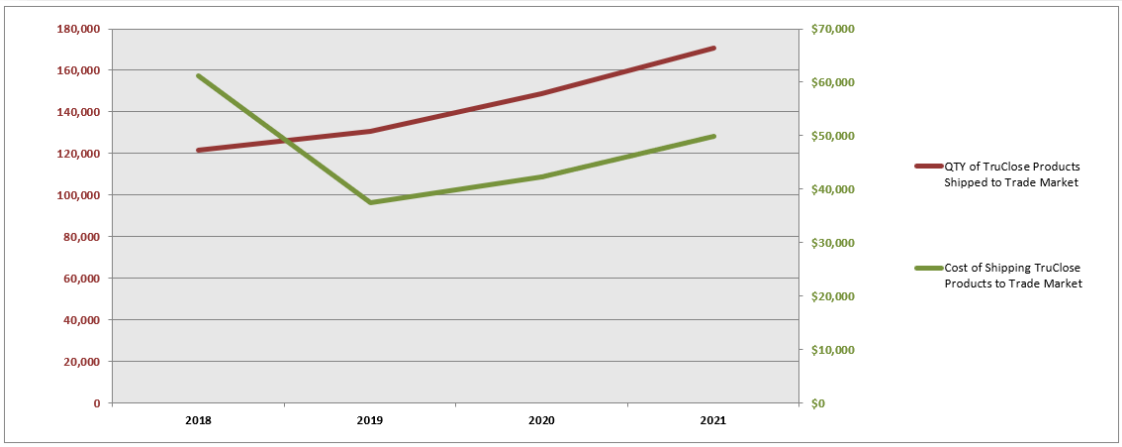


Figure 6.8. Shipping Cost Impact of TruClose® Trade product lines from 2018 to forecasted 2021.

D&D shall continue to track progress of this initiative throughout the 2019-2024 reporting period.

For ***Initiative D*** (Evaluating packaging using SPG – Sustainable Packaging Guidelines) for our MagnaLatch® Retail product lines), we have seen a positive result in reducing consumption of cardboard packing.

Based on 2021 forecasted figures, Table 6.9 and Figure 6.10 below show the environmental impact on the business by implementing efficient packaging of our MagnaLatch® retail product lines.

ENVIRONMENTAL COST IMPACT (CALENDER YEAR)	2019	2020	2021	%
QTY of MagnaLatch Products Shipped to Retail Market	45,258	54,754	46,284	2.3%
QTY of Packaging Used (KG)	46,240	55,435	46,129	-0.2%

Table 6.9. Environment impact trend on packing MagnaLatch® Retail Products in bulk packaging configurations

In 2020, we initiated a review of cartons used for the shipment of MagnaLatch® Retail product lines. In 2019, the calculated weights of cartons used for the shipment of MagnaLatch® Retail product lines is 46,239.87 KG.

Based on the 2021 forecasted figures, it is anticipated a sales increase of 1,026 MagnaLatch® Retail products (around a 2.3% increase) over 2019. However, due to the implementation of customised packaging, we anticipate a reduction of 110.96 KG in the use of cardboard which is an improvement of 2%.

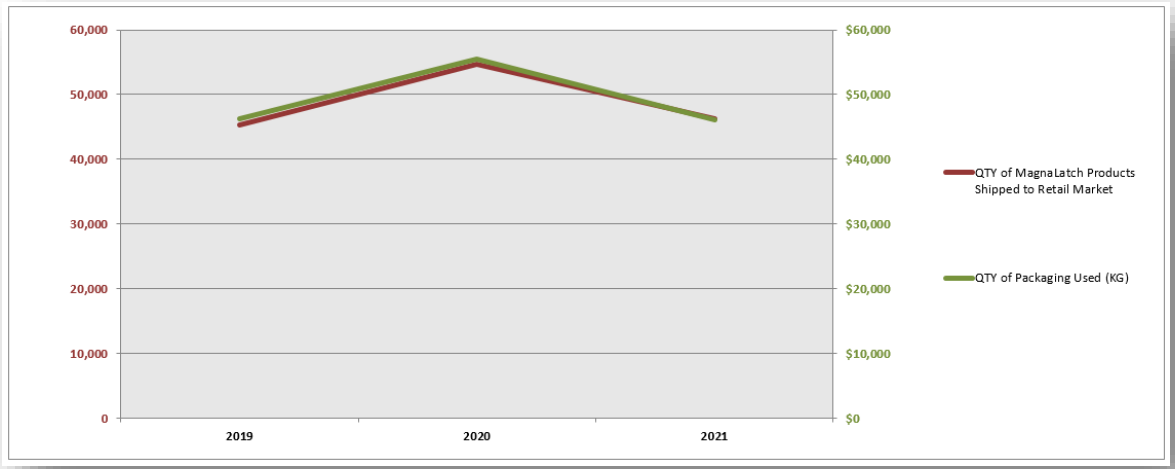


Figure 6.10. Environment impact trend on packing MagnaLatch® Retail Products in bulk packaging configurations

Not only is this initiative reduces our carbon footprint by reducing transportation and minimising packaging, we expect additional benefits by reducing our freight cost.

Based on 2021 forecasted figures, Table 6.11 and Figure 6.12 below show the shipping cost impact on the business by implementing efficient packaging of our MagnaLatch® Retail product lines.

SHIPPING COST IMPACT (CALENDER YEAR)	2019	2020	2021	%
QTY of MagnaLatch Products Shipped to Retail Market	45,258	54,754	46,284	2.3%
Cost of Shipping MagnaLatch Products to Retail Market	$ 74,935.56	$ 87,481.16	$ 52,933.99	-29.4%

Table 6.11. Shipping Cost Impact of MagnaLatch® Retail Product lines from 2019 to forecasted 2021.

In 2019, the calculated shipping cost for the MagnaLatch® Retail product line is $74,935.56 based on the shipping of 45,258 products.

Based on the 2021 forecasted figures, it is anticipated a sales increase of 1,026 MagnaLatch® Retail products (around a 2.3% increase) over 2019. However, we anticipate a reduction of 29.36% to the shipping cost, which equates to a cost saving of $22.001.57. The drop in shipping cost is due to the implementation of customised packaging for respective retail SKUs. The shipping cost variance between the current shipping carton configuration VS new shipping carton configuration can be found in Section 5 (Initiative D).

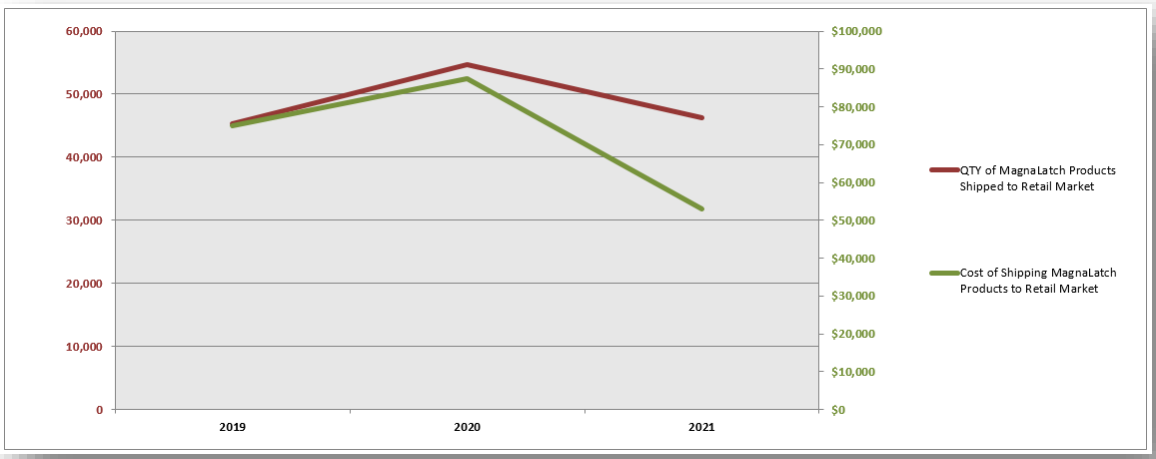


Figure 6.12. Shipping Cost Impact of MagnaLatch® Retail product lines from 2019 to forecasted 2021.

D&D shall continue to track progress of this initiative throughout the 2020-2025 reporting period.

7. New Opportunities and Challenges

D&D will be further exploring new opportunities in reducing our cardboard packaging consumption by consolidating the range of cardboard packaging being consumed during manufacturing. D&D currently consumes over 40 different models of cardboard packaging. To prevent stock shortage, each model of cardboard packaging carries a safety stock level. In addition, each model carries a Minimum Order Quantity (MOQ) with the supplier. The combination of a safety stock level and MOQ increases our consumption of cardboard packaging. The challenge is to consolidate the models of cardboard packaging whilst meeting strict demands from our customers. D&D has already achieved this hurdle by changing the packaging configurations for the US Retail, the TruClose® Trade, and MagnaLatch® Retail product lines.

D&D will be exploring new opportunities and closely working with suppliers on the design and technical specifications for lightweight recycled LDPE flexible packaging for our trade product lines.

D&D will also be seeking opportunities on the new design to optimise product packaging sizes and use recycled material for our retail pouch bags.

8. Conclusion

Cost is often the initial driver for a packaging change, but utilising the four principles of the Sustainable Packaging Guidelines (SPG) to reinforce the business proved to be beneficial.

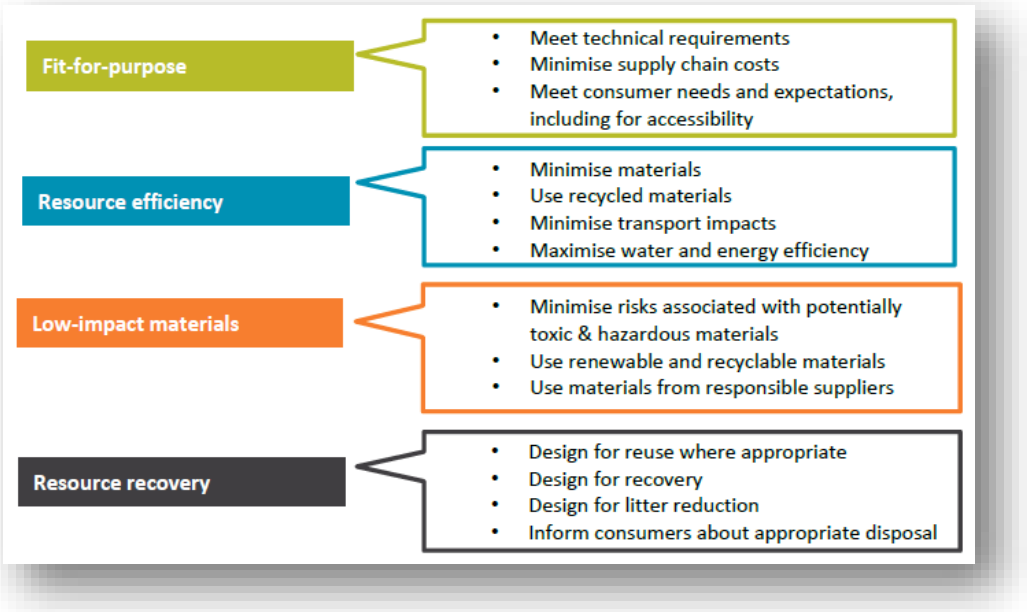


Figure 8.1. Four principles of the Sustainable Packaging Guidelines (SPG)

For ***Initiative A*** (Evaluating packaging using SPG – Sustainable Packaging Guidelines) for our US retail product lines. Under ***Initiative A***, D&D has managed to:

a. Reduced consumption of cardboard packaging by 1,862.87 KG in 2020, while we experienced an increase of around 181% in sales over the same period in 2017. To put this figure into perspective, if we were to continue with the previous 2*6 packaging configurations for 2020, we estimated a further greater potential saving of 38,173.44 kg in the use of cardboard packaging.

b. Reduced shipping cost of our US Retail Product Lines by $3,666.36 in 2020, which equates to a reduction of 3% over the same period in 2017. To put this figure into perspective, if we were to continue with the previous 2*6 packaging configurations for 2020, we estimated a further greater potential saving of $228,038.42 in shipping costs for calculated 2020 calendar year.

For ***Initiative B*** (Consolidating and harmonising packaging material specifications) for our retail pouches, D&D worked closely with various suppliers and testing laboratories to achieve a common material specification for our retail pouches that allows a more robust packaging material that is in line with SPG guidelines and more suited D&D's requirements. All D&D packaging artwork now includes a specification table with the material specification.

For ***Initiative C*** (Evaluating packaging using SPG – Sustainable Packaging Guidelines) for our TruClose® Trade Product lines. Under ***Initiative C***, D&D has managed to:

a. Reduced consumption of cardboard packaging by 2,721 KG in 2020, while we experienced an increase of around 22% in sales over the same period in 2018. To put this figure into perspective, if we were to continue with the previous 5*4 packaging configurations for 2020, we estimated a further greater potential saving of 8,192.16 KG in the use of cardboard packaging.

b. Reduced shipping cost of our TruClose® Trade Product Lines by $18,853 in 2020, which equates to a reduction of 31% over the same period in 2018. To put this figure into perspective, if we were to continue with the previous 5*4 packaging configurations for 2020, we estimated a further greater potential saving of $32,204.57 in shipping costs for calculated 2020 calendar year.

For ***Initiative D*** (Evaluating packaging using SPG – Sustainable Packaging Guidelines) for our MagnaLatch® Retail Product lines. Under ***Initiative D***, D&D will manage to:

a. Reduce consumption of cardboard packaging by 1381.08 KG in 2021 if we were to continue with the previous shipping cartons for 2020.

b. Reduce shipping cost of our MagnaLatch® Retail Product Lines by $25,446.15 in 2021 if we were to continue with the shipping cartons for 2020.

For ***Initiative E*** (Sustainable New Retail Packaging Program) for our retail pouches, D&D has initiated the review programme of the pouch design and effective recyclable material to reduce material waste and associated environmental impacts in the packaging lifecycle.